

10/019898

1140668-0005

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED OFFICE (DO/US)

<u>PCT/DE00/02025</u>	<u>21 June 2000</u>	<u>29 June 1999</u>
International Application Number	International Filing Date	Priority Date(s) Claimed

**COMMUNICATIONS SYSTEM AND COMMUNICATIONS METHOD FOR AN  
AUTOMATION DEVICE WITH COMMUNICATIONS DATA STORED IN THE  
AUTOMATION DEVICE**

Title of Invention

Joachim Schmitt  
Applicant(s) for DO/US

<p>"Express Mail" Label No <u>EL608305319US</u></p> <p>Date of Deposit <u>December 28, 2001</u></p> <p>I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.</p> <p><u>Michael Ramos</u> (Type or print name of person mailing paper or fee)</p> <p><u>Michael Ramos</u> (Signature of person mailing paper or fee)</p>
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BOX PCT  
Assistant Commissioner for Patents  
Washington, D.C. 20231

To the United States Designated Office (DO/US):

- I. Accompanying this transmittal letter are certain items which are required under 35 U.S.C. 371 in order that United States National processing of the above identified International application may commence:
- ( ) at the expiration of the applicable time limit under PCT Articles 22 and 39(1) according to the provisions of 35 U.S.C. 371(b).
  - (X) as soon as possible upon receipt of this express request under 35 U.S.C. 371(f).
1. The U.S. National fee [35 U.S.C. 371(c)(1)]

a. ( ) was previously transmitted by applicant on (date)\_\_\_\_\_.

b. (X) is submitted herewith as follows:

<u>FOR</u> <u>FEE</u>	<u>NO. FILED</u>	<u>NO. EXTRA</u>	<u>SMALL ENTITY</u>		<u>or</u>	<u>OTHER THAN</u> <u>SMALL ENTITY</u>	
			<u>RATE</u>	<u>FEE</u>		<u>RATE</u>	
Basic Fee	Search Report Prepared by EPO		////	\$445	<u>or</u> ////		\$ 890
Total Claims	20 -20 =	0	x 9 =		<u>or</u> x18 =		\$
Ind. Claims	3-3	0	x 42 =		<u>or</u> x84 =		\$
( ) Multiple Dependent Claim Presented			+140 =		<u>or</u> + 280 =		\$
<b>TOTAL</b>			<b><u>NATIONAL FEE</u></b>		<b>\$ _____</b>	<b><u>or</u></b>	<b><u>\$ 890</u></b>

i. ( ) Enclosed are two checks which total the amount of  
to cover the basic filing fee, the multiple dependent claim  
fee, and the excess independent claim fee.

ii. (X) A Preliminary Amendment canceling claims is enclosed. The calculation  
of the filing fees pursuant to 37 C.F.R. §1.16(b), (c) and (d) is based on the claims  
remaining after the Preliminary Amendment. *Please charge the filing fee, multiple  
dependent claim fee (if applicable), excess independent claims fee (if applicable), and  
excess total claims fee (if applicable) to Deposit Account No. 23-1703.*

iii. (X) **The Commissioner is hereby authorized to charge any additional  
fees which may be required, or credit any overpayment to Deposit  
Account No. 23-1703.** A duplicate copy of this sheet is enclosed.

2. A copy of the International application as filed [35 U.S.C. 371(c)(2)]:

a. (X) is transmitted herewith.

b. ( ) is not required as the application was filed with the United States  
Receiving Office.

c. ( ) has been transmitted

i. ( ) by the International Bureau. Date of mailing of the application (from  
form PCT/IB/308): \_\_\_\_\_ A copy of form PCT/IB/308 is  
enclosed.

- ii. ( ) by applicant on (date) \_\_\_\_\_.
3. A translation of the International application into the English language [35 U.S.C. 371(c)(2)]:
- a. (X) is transmitted herewith.
- b. ( ) is not required as the application was filed in English.
- c. ( ) was previously transmitted by applicant on (date) \_\_\_\_\_.
4. Amendments to the claims of the International application under PCT Article 19 [35 U.S.C. 371(c)(3)]:
- a. ( ) are transmitted herewith
- b. ( ) have been transmitted
- i. ( ) by the International Bureau. Date of mailing of the amendments (from form PCT/IB/308): \_\_\_\_\_.
- ii. ( ) by applicant on (date) \_\_\_\_\_.
- c. (X) have not been transmitted as
- i. ( ) no notification has been received that the International Searching Authority has received the Search Copy.
- ii. ( ) the Search Copy was received by the International Searching Authority but the Search Report has not yet issued. Date of receipt of Search Copy (from form PCT/ISA/202): \_\_\_\_\_.
- iii. ( ) applicant chose not to make amendments under PCT Article 19. Date of mailing of Search Report (from form PCT/ISA/210): \_\_\_\_\_.

- iv. ☐ the time limit for the submission of amendments has not yet expired. The amendments or a statement that amendments have not been made will be transmitted before the expiration of the time limit under PCT Rule 46.1.
5. A Translation of the amendments to the claims under PCT Article 19 [35 U.S.C. 371(c)(3)]:
- a. ☐ is transmitted herewith.
- b. ☐ is not required as the amendments were made in the English language.
- c. ☐ has not been transmitted for reasons indicated at point I.4.b. or c. above.
6. An original executed declaration for patent application of the inventors [35 U.S.C. 371(c)(4)] complying with 35 U.S.C. 115:
- a. ☐ was previously submitted by applicant on (date) \_\_\_\_\_
- b. ☒ is submitted herewith;  
and such oath or declaration
- i. ☒ is attached to the application.
- ii. ☐ identify the application and any amendments under PCT Article 19 which were transmitted as stated in points 1.2.b. or c. and 1.4. and states that they were reviewed by the inventor as required by 37 CFR 1.70.
- c. ☐ will be submitted subsequently.

II. Concerning other documents:

1. An International Search Report or Declaration under PCT Article 17(2)(a):
- a. ☐ has been transmitted by the International Bureau. Date of mailing (from form PCT/IB/308): \_\_\_\_\_ A copy of form PCT/IB/308 is enclosed
- b. ☐ is not required as the application was searched by the United States International Searching Authority.
- c. ☒ A copy of the International Search Report and International Preliminary Examination Report are transmitted herewith.
- d. ☐ has been submitted by applicant on (date) \_\_\_\_\_
2. A Statement of prior art under 37 CFR 1.97 and 1.98:

10/019898

531 Rec'd PCT/PTC 28 DEC 2001

- a. ☐ is transmitted herewith including copies of the references cited on the attached form PTO-1449.
- b. ☒ will be transmitted within THREE MONTHS of the date of submission of requirements under 35 U.S.C. 371(c).
- c. ☐ was previously submitted by applicant on \_\_\_\_\_, in application serial no. \_\_\_\_\_.
3. ☒ An original executed Assignment is transmitted herewith for recording.  
A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
- a. ☒ Please charge the \$40.00 assignment recordation fee to Deposit Account No. 23-1703.
- b. ☐ Enclosed is a check in the amount of \$\_\_\_\_\_.
4. **Other document(s) or information included:**
- Copy of Antrag - PCT/RO/101 Easy Version 2.90;
  - Copy of PCT/IPEA/416;
  - Preliminary Amendment;
  - Signed Declaration/Power of Attorney;
  - One sheet of formal drawing (Figures 1 and 2);
  - International Search Report PCT/ISA/220; and
  - Return postcard.

Respectfully submitted,



Scott T. Weingaertner  
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Applicants' Attorney  
Attorney's Direct Line (212)-819-8404  
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Date: December 28, 2001

Enclosures

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Schmitt, J.  
Serial No. : To be assigned  
Filed : Herewith  
For : COMMUNICATIONS SYSTEM AND COMMUNICATIONS  
METHOD FOR AN AUTOMATION DEVICE WITH  
COMMUNICATIONS DATA STORED IN THE AUTOMATION  
DEVICE  
Examiner : To be assigned  
Group Art Unit : To be assigned

**Box Patent Application**

Assistant Commissioner for Patents  
Washington, D.C. 20231

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Michael Br. mds

Name of person mailing paper or fee

Michael Br. mds

Signature of person mailing paper or fee

PRELIMINARY AMENDMENT

Sir:

Preliminary to examination on the merits, please amend the application as  
follows:

**IN THE SPECIFICATION:**

On page 1, first line, delete: "Description".

On page 1, immediately before paragraph [0001], insert: --Field of the Invention--.

On page 1, before paragraph [0002], insert: --Background--.

On page 1, before paragraph [0003], insert: --Summary of the Invention--.

On page 3, before paragraph [0012], insert: --Brief Description of the Figures--

On page 4, before paragraph [0014], insert: --Detailed Description of the Invention--.

Please delete paragraph 0015 and substitute the following new paragraph 0015:

--[0015] The central element of the communications system shown in Figure 1 is the memory 4 of the automation device 1. The memory 4 stores the information relating to the automation device 1 and also the communications protocols for the automation device 1. This means that the device information stored in the application program in previous solutions migrates from the application program to the automation device 1. To this end, the operating dialogs and communications protocols are stored in the memory 4 in the form of, in particular, compiled Java objects. The memory 4 used is, by way of example, a RAM, EEPROM, FLASH, etc. memory. In this context, the memory requirement is kept as low as possible on

account of a compressed storage form. For operation, the respectively required operating dialogs and communications protocols are transferred from the memory 4, i.e. from the automation device 1, to the data processing apparatus 2, for example to a personal computer or a programming device. There, these operating dialogs and communications protocols are executed and displayed by the application program 5, for example an Internet browser or a similar program. For the data interchange via the data link 3, a standard protocol, such as TCP (= Transport Communication Protocol) or IP (= Internet Protocol), is used, in particular. The advantages of the communications system shown in Figure 1 are as follows: the operating dialogs and communications protocols are always suitable for the automation device, since they are provided by the automation device itself, which is also advantageous particularly when device versions are changed. In addition, there is no or only very little difficulty for matching and/or changing over an application program 5 to a new automation device 1. The logical use of a standard communications protocol results in maintenance efforts being further reduced. In addition, increased use of innovative techniques, such as Internet-based service and support, becomes possible.--

Please delete paragraph 0016 and substitute the following new paragraph 0016:

--[0016] Figure 2 shows a block diagram of a second exemplary embodiment of a communications system having an automation device 1 that can communicate with data processing apparatuses 2, 8 via data links 3, 3a. The automation device 1, again, has a memory 4 for storing communications data and device information. The first data processing apparatus 2 again contains an application program 5 for



communicating with the automation device 1 via the data link 3. In addition, the communications system shown in Figure 2 provides the option of data communications between a second data processing apparatus 8 with the automation device 1 via a data link 3, 3a, via an Internet server 6 and via an Internet connection 7.--

On page 10, after "Abstract", delete "Communications system and communications method for an automation device with communications data stored in the automation device".

Please delete Abstract, and substitute the following new Abstract:

--The invention relates to a communications system for communications between a data processing apparatus and an automation device. For simplified operation of the automation device virtually independently of a specific application program with specific device information relating to the automation device, the invention proposes that the automation device have a memory for storing communications data for communicating, in particular, with a standardized communications program. This means that the communications data are firmly connected to the automation device, and the operating dialogs and/or communications protocols are thus always suitable for the respective automation device. This permits logical use of standard communications programs, for example in the form of Internet browsers. This enhances the opportunity to use Internet techniques for service and support in the environment of automation devices.--

**IN THE CLAIMS:**

Please cancel claims 1-12 without prejudice and add new claims 13-32:

--13. (New) A communications system for communication over a data network comprising:

a data processing apparatus running a browser; and

an automation device in communication with the data processing apparatus over the data network, the automation device comprising:

a memory arranged in the automation device and storing communications data, the communications data comprising:

operating dialogs for the operation of the automation device and for communication with the browser in the data processing apparatus, and

device information for service and support of the automation device over the data network ;

whereby the stored communications data and device information are transmitted from the automation device to the data processing apparatus over the data network by way of a standard protocol.

14. (New) The communications system according to claim 13, wherein the operating dialogs comprise Java objects.

15. (New) The communications system according to claim 13, wherein the communications data stored in the memory comprise data in compressed form.

16. (New) The communications system according to claim 14, wherein the communications data stored in memory comprise data in compressed form.

17. (New) The communications system according to claim 13, wherein the data network comprises an Internet.

18. (New) The communications system according to claim 13, wherein the browser comprises an Internet browser.

19. (New) The communications system according to claim 13, wherein the communications data stored in the memory are transferred from the automation device to the data processing apparatus for operating the automation device.
20. (New) The communications system according to claim 13, wherein the communications data transferred from the automation device to the data processing apparatus are executed in the browser and are displayed by the data processing apparatus.
21. (New) The communications system according to claim 13, further comprising at least a second data processing apparatus having a browser and in communication with the automation device over the data network, and wherein the stored communications data and device information are transmitted from the automation device to the second data processor over the data network by way of a standard protocol.
22. (New) The communications system according to claim 21, wherein the second data processing apparatus is in communication with the automation device via the Internet.
23. (New) A method for communications over a data network between a data processing apparatus having a browser and an automation device, the method comprising the steps of:
- storing, in a memory arranged in the automation device, communications data for communicating with the browser, the communications data comprising
    - operating dialogs for the operation of the automation device and communications with the browser in the data processing apparatus, and
    - device information for service and support of the automation device over the data network; and
  - transmitting the stored communications data and device information from the automation device to the data processor over the data network by way of a standard protocol.

24. (New) The method according to claim 23, wherein the communications data comprises Java objects.
25. (New) The method according to claim 23, wherein the communications data stored in the memory comprises data in compressed form.
26. (New) The method according to claim 23, wherein the browser comprises an Internet browser.
27. (New) The method according to claim 23, wherein the communications data transferred from the automation device to the data processing apparatus are executed in the browser and are displayed by the data processing apparatus.
28. (New) An automation device for communications over a data network with at least one data processing apparatus having a browser, the automation device comprising:
- a memory arranged in the automation device and storing communications data comprising:
    - operating dialogs for the operation of the automation device and communication with the browser in the data processing apparatus, and
    - device information for service and support of the automation device over the data network ,
 whereby the stored communications data and device information are transmitted from the automation device to the data processing apparatus over the data network by way of a standard protocol.
29. (New) The automation device according to claim 28, wherein the communications data comprises Java objects.
30. (New) The automation device according to claim 28, wherein the communications data comprises data stored in the memory in compressed form.
31. (New) The automation device according to claim 28, wherein the data network comprises an Internet.

32. (New) The automation device according to claim 28, wherein the at least one data processing apparatus comprises a plurality of apparatuses and the stored communications data and device information are transmitted from the automation device to the plurality of data processing apparatuses over the data network.--

### REMARKS

Upon entry of this Preliminary Amendment, claims 13-32 are pending.

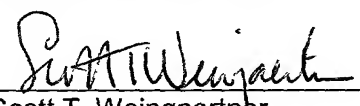
Support for new claims 13-32 is provided in the specification, including the originally filed claims. No new matter has been added.

This amendment is voluntary and not in response to any rejection made in this application.

Authorization is given to charge Deposit Account No. 19-2179 for any fee due in connection with this communication.

Dated: December 28, 2001

Respectfully submitted,

  
\_\_\_\_\_  
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# Version With Markings to Show Changes Made

[0015] The central element of the communications system shown in Figure 1 is the memory 4 of the automation device 1. The memory 4 stores the information relating to the automation device 1 and also the communications protocols for the automation device 1. This means that the device information stored in the application program in previous solutions migrates from the application program to the automation device 1. To this end, the operating dialogs and communications protocols are stored in the memory 4 in the form of, in particular, compiled Java objects. The memory 4 used is, by way of example, a RAM, EEPROM, [SLASH] FLASH, etc. memory. In this context, the memory requirement is kept as low as possible on account of a compressed storage form. For operation, the respectively required operating dialogs and communications protocols are transferred from the memory 4, i.e. from the automation device 1, to the data processing apparatus 2, for example to a personal computer or a programming device. There, these operating dialogs and communications protocols are executed and displayed by the application program 5, for example an Internet browser or a similar program. For the data interchange via the data link 3, a standard protocol, such as TCP (= Transport Communication Protocol) or IP (= Internet Protocol), is used, in particular. The advantages of the communications system shown in Figure 1 are as follows: the operating dialogs and communications protocols are always suitable for the automation device, since they are provided by the automation device itself, which is also advantageous particularly when device versions are changed. In addition, there is no or only very little difficulty for matching and/or changing over an application program 5 to a new automation device 1. The logical use of a standard

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communications protocol results in maintenance efforts being further reduced. In addition, increased use of innovative techniques, such as Internet-based service and support, becomes possible.

[0016] Figure 2 shows a block diagram of a second exemplary embodiment of a communications system having an automation device 1 that can communicate with data processing apparatuses 2, 8 via data links 3, 3a. The [first data processing apparatus] automation device 1, again, has a memory 4 for storing communications data and device information. The first data processing apparatus 2 again contains an application program 5 for communicating with the automation device 1 via the data link 3. In addition, the communications system shown in Figure 2 provides the option of data communications between a second data processing apparatus 8 with the automation device 1 via a data link 3, 3a, via an Internet server 6 and via an Internet connection 7.

## Abstract

The invention relates to a communications system for communications between a data processing apparatus [(2)] and an automation device [(1)]. For simplified operation of the automation device [(1)] virtually independently of a specific application program with specific device information relating to the automation device [(1)], the invention proposes that the automation device [(1)] have a memory [(4)] for storing communications data for communicating, in particular, with a standardized communications program [(5)]. This means that the communications data are firmly connected to the automation device [(1)], and the operating dialogs and/or communications protocols are thus always suitable for the respective automation device [(1)]. This permits logical use of standard communications programs [(5)], for example in the form of Internet browsers. This enhances the opportunity to use Internet techniques for service and support in the environment of automation devices [(1)].



1/PRTS

Attorney Docket No. 1140668-0005

## Description

Communications system and communications method for an automation device with communications data stored in the automation device

[0001] The invention relates to a communications system and to a communications method for communications between a data processing apparatus.

[0002] Such a communications system is required, for example, for communications in the field of automation drive technology. In this context, during configuration, parameter assignment, during startup, etc., it is necessary to operate the automation device from a data processing apparatus, for example a personal computer or a special programming device. Such operation is performed, by way of example, using a specific application program containing information relating to the respective automation device.

[0003] The invention is based on the object of specifying a communications system and a communications method which allow communications between data processing apparatus and automation device as independently of the application program as possible.

[0004] This object is achieved by a communications system for communications between a data processing apparatus and an automation device having a memory, arranged in the automation device, for storing communications data for communicating with a communications program.

[0005] This object is also achieved by a method for communications between a data processing apparatus and an automation device, in which communications data stored in a memory of the automation device are transferred from the automation device to the data processing apparatus and are executed for communication with a communications program.

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[0006] The invention is based on the realization that the operation of an automation device using an application program which incorporates device information has particular drawbacks. A first drawback is that the user first needs to install the application program so that communication with the automation device becomes possible. Another drawback is that new versions of an automation device first need to be made known to the application program before the automation device can also be operated with the new version. The result of these drawbacks is that changes to the automation device or to the data interchange method always need the application program to be changed as well. With the inventive communications system, the communications data, i.e., the device information and the communications protocols, are stored in the automation device itself. For operation, the respectively required operating dialogs and communications protocols are then transferred to the data processing apparatus, for example to a PC or to a programming device. In the data processing apparatus, the operating dialogs and communications protocols are then executed and displayed by the application program, for example a standardized Internet browser or a similar program. Consequently, the information relating to the automation device migrates from the application program to the automation device itself, which means that the operating dialogs and communications protocols are always suitable for the respective automation device. Changes in the device are therefore independent of the application program, so that corresponding changes in the application program are not necessary.

[0007] Standard data transfer suitable for a multiplicity of communications programs can be ensured by virtue of the memory being provided for storing operating dialogs and/or communications protocols in the form of Java objects.

[0008] The memory requirement needed in the automation device can be kept low by virtue of the communications data being stored in the memory in compressed form.

[0009] The complexity of the application program for communicating with the

automation device can be kept to a minimum by virtue of the communications program being an Internet browser, and by virtue of a standard protocol being provided for transferring the communications data between the automation device and the communications program.

[0010] Safe operation of the automation device is ensured by virtue of the communications data stored in the memory, in particular operating dialogs and communications protocols, being transferred from the automation device to the data processing apparatus for the purpose of operating the automation device.

[0011] Reliable communications between automation device and data processing apparatus is ensured by virtue of the communications data, transferred from the automation device to the data processing apparatus, being executed in the communications program, in particular an Internet browser, and being displayed by the data processing apparatus.

[0012] The invention is described and explained in more detail below using the exemplary embodiments shown in the figures.

[0013] In the figures:

Figure 1 shows a block diagram of a first exemplary embodiment of a communications system having an automation device and a data processing apparatus, and

Figure 2 shows a block diagram of a second exemplary embodiment of a communications system having an automation device and a data processing apparatus.

[0014] Figure 1 shows a block diagram of a first exemplary embodiment of a communications system having an automation device 1 and a data processing apparatus 2. The automation device 1 has a memory 4 for storing device

information and communications data. The data processing apparatus 2 contains an application program 5 which permits data interchange via a data link 3 between the data processing apparatus 2 and the automation device 1.

[0015] The central element of the communications system shown in Figure 1 is the memory 4 of the automation device 1. The memory 4 stores the information relating to the automation device 1 and also the communications protocols for the automation device 1. This means that the device information stored in the application program in previous solutions migrates from the application program to the automation device 1. To this end, the operating dialogs and communications protocols are stored in the memory 4 in the form of, in particular, compiled Java objects. The memory 4 used is, by way of example, a RAM, EEPROM, SLASH, etc. memory. In this context, the memory requirement is kept as low as possible on account of a compressed storage form. For operation, the respectively required operating dialogs and communications protocols are transferred from the memory 4, i.e. from the automation device 1, to the data processing apparatus 2, for example to a personal computer or a programming device. There, these operating dialogs and communications protocols are executed and displayed by the application program 5, for example an Internet browser or a similar program. For the data interchange via the data link 3, a standard protocol, such as TCP (= Transport Communication Protocol) or IP (= Internet Protocol), is used, in particular. The advantages of the communications system shown in Figure 1 are as follows: the operating dialogs and communications protocols are always suitable for the automation device, since they are provided by the automation device itself, which is also advantageous particularly when device versions are changed. In addition, there is no or only very little difficulty for matching and/or changing over an application program 5 to a new automation device 1. The logical use of a standard communications protocol results in maintenance efforts being further reduced. In addition, increased use of innovative techniques, such as Internet-based service and support, becomes possible.

[0016] Figure 2 shows a block diagram of a second exemplary embodiment of a communications system having an automation device 1 that can communicate with data processing apparatuses 2, 8 via data links 3, 3a. The data processing apparatus 1, again, has a memory 4 for storing communications data and device information. The first data processing apparatus 2 again contains an application program 5 for communicating with the automation device 1 via the data link 3. In addition, the communications system shown in Figure 2 provides the option of data communications between a second data processing apparatus 8 with the automation device 1 via a data link 3, 3a, via an Internet server 6 and via an Internet connection 7.

[0017] The first data processing apparatus 2 and the automation device communicate in the manner already described in connection with Figure 1. The second data processing apparatus 8 and the automation device 1 communicate using the application program 5a present in the second data processing apparatus via an Internet connection 7 to the Internet server 6, from which there is, in turn, a data link 3, 3a to the automation device 1. In this case, too, the application program 5a in the second data processing apparatus 8 accesses the device information and communications protocols in the memory 4 of the automation device 1, which allows increased use of Internet techniques for service and support in the environment of the automation devices 1.

[0018] In summary, the invention thus relates to a communications system for communications between a data processing apparatus 2 and an automation device 1. For simplified operation of the automation device 1 virtually independently of a specific application program with specific device information relating to the automation device 1, the invention proposes that the automation device 1 have a memory 4 for storing communications data for communicating, in particular, with a standardized communications program 5. This means that the communications data are firmly associated with the automation device 1, and the operating dialogs and/or communications protocols are thus always

suitable for the respective automation device 1. This permits logical use of standard communications programs 5, for example in the form of Internet browsers. This enhances the opportunity to use Internet techniques for service and support in the surroundings of automation devices 1.

Patent Claims

1. A communications system for communications between a data processing apparatus (2) and an automation device (1), having a memory (4), arranged in the automation device (1), for storing communications data for communicating with a communications program (5).
2. The communications system as claimed in claim 1, characterized in that the memory (4) is provided for storing operating dialogs and/or communications protocols in the form of Java objects.
3. The communications system as claimed in one of claims 1 or 2, characterized in that the communications data are stored in the memory (4) in compressed form.
4. The communications system as claimed in one of claims 1 to 3, characterized in that the communications program (5) is an Internet browser, and in that a standard protocol is provided for transferring the communications data between the automation device (1) and the communications program.
5. The communications system as claimed in one of claims 1 to 4, characterized in that the communications data stored in the memory (4), in particular operating dialogs and communications protocols, are transferred from the automation device (1) to the data processing apparatus (2) for the purpose of operating the automation device (1).

6. The communications system as claimed in one of claims 1 to 5,  
characterized  
in that the communications data transferred from the automation device (1)  
to the data processing apparatus (2) are executed in the communications  
5 program, in particular an Internet browser, and are displayed by the data  
processing apparatus.

7. A method for communications between a data processing apparatus  
(2) and an automation device (1), in which communications data stored in a  
10 memory (5) of the automation device (1) are transferred from the  
automation device (1) to the data processing apparatus (2) and are  
executed for communicating with a communications program (5).

8. The method as claimed in claim 7,  
15 characterized  
in that the memory (4) stores operating dialogs and/or communications  
protocols in the form of Java objects.

9. The method as claimed in one of claims 7 or 8,  
20 characterized  
in that the communications data are stored in the memory (4) in  
compressed form.

10. The method as claimed in one of claims 7 to 9,  
25 characterized  
in that an Internet browser is used as the communications program (5) for  
communications between automation device (1) and data processing  
apparatus (2), and in that a standard protocol is used for transferring the  
communications data between the automation device (1) and the  
30 communications program.



11. The method as claimed in one of claims 7 to 10,  
characterized

in that the communications data stored in the memory (4), in particular  
operating dialogs and communications protocols, are transferred from the  
5 automation device (1) to the data processing apparatus (2) for the purpose  
of operating the automation device (1).

12. The method as claimed in one of claims 7 to 11,  
characterized

10 in that the communications data transferred from the automation device (1)  
to the data processing apparatus (2) are executed in the communications  
program, in particular an Internet browser, and are displayed by the data  
processing apparatus.

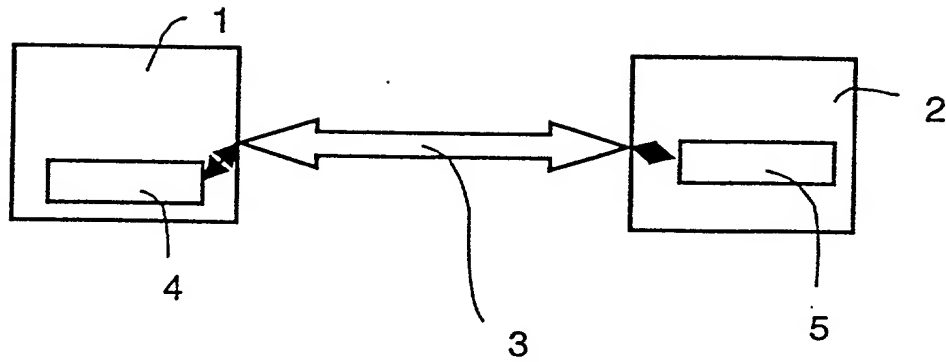


Fig. 1

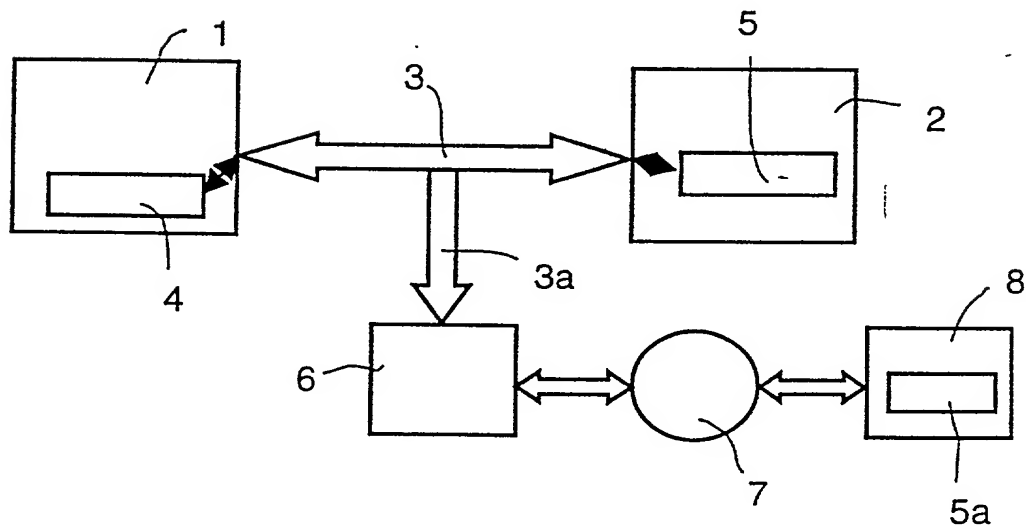


Fig. 2

# Declaration and Power of Attorney For Patent Application

## Erklärung Für Patentanmeldungen Mit Vollmacht

### German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:

dass mein Wohnsitz, meine Postanschrift, und meine Staatsangehörigkeit den im Nachstehenden nach meinem Namen aufgeführten Angaben entsprechen,

dass ich, nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein Patent beantragt wird für die Erfindung mit dem Titel:

Kommunikationssystem und  
Kommunikationsverfahren für ein  
Automatisierungsgerät mit im  
Automatisierungsgerät gespeicherten  
Kommunikationsdaten

deren Beschreibung

(zutreffendes ankreuzen)

☐ hier beigefügt ist.

☒ am 21.06.2000 als

PCT internationale Anmeldung

PCT Anmeldungsnummer PCT/DE00/02025

eingereicht wurde und am \_\_\_\_\_

abgeändert wurde (falls tatsächlich abgeändert).

Ich bestätige hiermit, dass ich den Inhalt der obigen Patentanmeldung einschliesslich der Ansprüche durchgesehen und verstanden habe, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurde.

Ich erkenne meine Pflicht zur Offenbarung irgendwelcher Informationen, die für die Prüfung der vorliegenden Anmeldung in Einklang mit Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) von Wichtigkeit sind, an.

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäss Abschnitt 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 119 aller unten angegebenen Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde, und habe auch alle Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde nachstehend gekennzeichnet, die ein Anmeldedatum haben, das vor dem Anmeldedatum der Anmeldung liegt, für die Priorität beansprucht wird.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

COMMUNICATIONS SYSTEM AND  
COMMUNICATIONS METHOD FOR AN  
AUTOMATION UNIT WITH  
COMMUNICATIONS DATA STORED IN  
SAID AUTOMATION UNIT

the specification of which

(check one)

☐ is attached hereto.

☒ was filed on 21.06.2000 as

PCT international application

PCT Application No. PCT/DE00/02025

and was amended on \_\_\_\_\_

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

# German Language Declaration

Prior foreign applications  
Priorität beansprucht

Priority Claimed

19929933.1

DE

29.06.1999

☒

☐

(Number)  
(Nummer)

(Country)  
(Land)

(Day Month Year Filed)  
(Tag Monat Jahr eingereicht)

Yes  
Ja

No  
Nein

(Number)  
(Nummer)

(Country)  
(Land)

(Day Month Year Filed)  
(Tag Monat Jahr eingereicht)

☐  
Yes  
Ja

☐  
No  
Nein

(Number)  
(Nummer)

(Country)  
(Land)

(Day Month Year Filed)  
(Tag Monat Jahr eingereicht)

☐  
Yes  
Ja

☐  
No  
Nein

Ich beanspruche hiermit gemäss Absatz 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 120, den Vorzug aller unten aufgeführten Anmeldungen und falls der Gegenstand aus jedem Anspruch dieser Anmeldung nicht in einer früheren amerikanischen Patentanmeldung laut dem ersten Paragraphen des Absatzes 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 122 offenbart ist, erkenne ich gemäss Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) meine Pflicht zur Offenbarung von Informationen an, die zwischen dem Anmeldedatum der früheren Anmeldung und dem nationalen oder PCT internationalen Anmeldedatum dieser Anmeldung bekannt geworden sind.

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §122, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

PCT/DE00/02025

(Application Serial No.)  
(Anmeldeseriennummer)

21.06.2000

(Filing Date D, M, Y)  
(Anmeldedatum T, M, J)

(Status)  
(patentiert, anhangig,  
aufgegeben)

pending

(Status)  
(patented, pending,  
abandoned)

(Application Serial No.)  
(Anmeldeseriennummer)

(Filing Date D,M,Y)  
(Anmeldedatum T, M; J)

(Status)  
(patentiert, anhangig,  
aufgeben)

(Status)  
(patented, pending,  
abandoned)

Ich erkläre hiermit, dass alle von mir in der vorliegenden Erklärung gemachten Angaben nach meinem besten Wissen und Gewissen der vollen Wahrheit entsprechen, und dass ich diese eidesstattliche Erklärung in Kenntnis dessen abgebe, dass wissentlich und vorsätzlich falsche Angaben gemäss Paragraph 1001, Absatz 18 der Zivilprozessordnung der Vereinigten Staaten von Amerika mit Geldstrafe belegt und/oder Gefängnis bestraft werden können, und dass derartig wissentlich und vorsätzlich falsche Angaben die Gültigkeit der vorliegenden Patentanmeldung oder eines darauf erteilten Patentes gefährden können.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## German Language Declaration

VERTRETUNGSVOLLMACHT: Als benannter Erfinder beauftrage ich hiermit den nachstehend benannten Patentanwalt (oder die nachstehend benannten Patentanwälte) und/oder Patent-Agenten mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Geschäfte vor dem Patent- und Warenzeichenamt: (Name und Registrationsnummer anführen)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

Customer No. 007470

And I hereby appoint

Telefongespräche bitte richten an:  
(Name und Telefonnummer)

Direct Telephone Calls to: (name and telephone number)

Ext. \_\_\_\_\_

Postanschrift:

Send Correspondence to:

White & Case LLP  
1155 Avenue of the Americas NY 10036-2787 New York  
Telephone: (001) 212-819-8404 and Facsimile (001) 212-354-8113  
or  
**Customer No. 007470**

Voller Name des einzigen oder ursprünglichen Erfinders: <b>1-00</b> <b>JOACHIM SCHMITT</b>		Full name of sole or first inventor. <b>JOACHIM SCHMITT</b>	
Unterschrift des Erfinders	Datum	Inventor's signature <i>Joachim Schmitt</i>	Date <b>10.12.01</b>
Wohnsitz <b>GROSSENSEEBACH, DEUTSCHLAND</b>		Residence <b>GROSSENSEEBACH, GERMANY DEU</b>	
Staatsangehörigkeit <b>DEUTSCH</b>		Citizenship <b>GERMANY</b>	
Postanschrift <b>FÖHRENWEG 15</b>		Post Office Address <b>FÖHRENWEG 15</b>	
<b>91091 GROSSENSEEBACH</b> <b>DEUTSCHLAND</b>		<b>91091 GROSSENSEEBACH</b> <b>GERMANY</b>	
Voller Name des zweiten Miterfinders (falls zutreffend):		Full name of second joint inventor, if any.	
Unterschrift des Erfinders	Datum	Second Inventor's signature	Date
Wohnsitz		Residence	
Staatsangehörigkeit		Citizenship	
Postanschrift		Post Office Address	
(Empty space for second inventor)		(Empty space for second inventor)	

(Bitte entsprechende Informationen und Unterschriften im Falle von dritten und weiteren Miterfindern angeben).

(Supply similar information and signature for third and subsequent joint inventors).